



CHAPTER 3 - OVERVIEW OF THE NEW HAMPSHIRE AND REGIONAL ECONOMY

3.1 INTRODUCTION

The following is an overview of the New Hampshire and regional economy over the past decade. The purpose of this analysis is to provide a broad snapshot of the state's economy and how it relates to aviation activity by providing a summary of changes in socioeconomic indicators such as population, employment, wages, unemployment and business establishments. Additionally, industry-specific profiles of key industrial sectors that strongly influence the State are provided. Various information sources were used in order to prepare this overview, including *New Hampshire in the New Economy: A Vision for Expanded Prosperity* published by the State of New Hampshire Governor's Office, the New Hampshire Department of Employment and Security, and the U.S. Bureau of Labor Statistics.

Almost every aspect of civil aviation activity is affected by demographic trends such as population, employment, and per capita income. Changes in demographic indicators on the regional and state level (Table 3A) can impact aviation demand (Table 3B), both on a short and long term basis. Based on statistical correlations developed nationally, there is a direct relationship between demographic trends and airline passenger activity, and the growth in the state's economy has been mirrored and even stimulated by the growth of airline service at Manchester Airport.

General aviation activity, however, does not show as close a statistical correlation with demographic trends as airline passenger traffic, in part because general aviation pilots and passengers represent a relatively small share of the state's total population. For example, in 2002 there were 3.36 million total passengers at Manchester Airport (almost three times more than the state's population), while there were approximately 4,200 licensed pilots in the state - less than one tenth of one percent of the state's population.

Demographic projections for each of the nine economic regions, and the state as a whole, were factored into the forecasts of future aviation activity in Chapter 4. It should be noted that educational levels were included in this analysis because it has an indirect bearing on existing and future aviation activity. In general, higher education levels translate into higher per capita income (on average), and also a higher propensity for air travel, both on the airlines and general aviation.

Table 3A - Socio-Economic Characteristics By Region - Year 2000									
	Population		Population	•				abor Force	
Region	Number % change*		Density/Sq.	\$	% change*	Unempl	Number	% change*	
			Mi.						
Central	104,152	8.7%	143.1	\$49,042	36.3%	2.1%	75,350	23.5%	
Lakes	94,690	10.0%	71.7	\$38,404	26.6%	2.4%	30,030	11.4%	
Nashua	190,088	10.9%	633.6	\$59,660	31.7%	3.0%	100,420	1.9%	
North Country	81,327	1.3%	24.2	\$34,195	29.0%	2.9%	62,430	5.6%	
Rockingham	180,866	12.9%	473.5	\$60,044	46.1%	3.3%	155,000	7.8%	
South	240,815	11.2%	492.5	\$53,807	38.3%	2.4%	105,560	3.5%	
Southwest	92,652	4.9%	94.6	\$43,915	31.8%	2.7%	38,480	-1.0%	
Strafford	129,663	7.6%	244.6	\$45,486	38.3%	2.4%	57,710	-0.2%	
Upper Valley	81,326	6.2%	75.2	\$44,672	40.2%	1.7%	43,650	3.8%	
N.H. Total	1,195,579	11.0%	130.5	\$48,928	25.6%	2.8%	668,630	9.2%	
*Note: % change	*Note: % change between 1990 – 2000								







Table 3B - Aviation Activity By Region -Year 2000							
Region	Enplaned	Based		Aircraft		Enplaned	Based AC
	Passengers*	Aircraft	%	Operation	18 %	Pass per Pop.	per 10K Pop
Central	63,000	81	7%	56,700	9.8%	.61	7.8
Lakes	67,400	132	11%	54,503	9.5%	.71	13.9
Nashua	126,200	374	30%	101,633	17.6%	.66	19.7
North Country	41,600	122	10%	33,250	5.8%	.51	15.0
Rockingham	78,000	161	12%	74,639	12.9%	.96	8.9
South	1,574,000	85	7%	107,832	18.7%	6.54	3.5
Southwest	68,500	108	9%	66,442	11.5%	.74	11.7
Strafford	23,200	68	5%	18,592	3.2%	.18	5.2
Upper Valley	73,700	109	9%	63,080	10.9%	.91	13.4
N.H. Total	2,115,600	1,240	100%	576,671	100%	1.77	10.4

^{*} Data includes both GA and scheduled airline passengers at Manchester Airport, Pease International Tradeport and Lebanon Municipal Airport. GA enplanements based on an average of 2.5 pilots & passengers per GA aircraft departure.

Historically, New Hampshire's economy was focused almost entirely on the manufacturing, agriculture and resource extraction industrial sectors. However, since the middle of the twentieth century, New Hampshire's economy has become much more diversified. This diversification now includes significant employment within the information technology, trade, health and business service sectors.

Currently, the large majority (over 99%) of companies in New Hampshire are small businesses which employ less than 500 employees. Of the approximately 36,000 business establishments in the state, only about 100 are considered large businesses (employing over 500 employees).

New Hampshire has experienced rapid economic growth during the early to mid 1990s. Between 1992 and 1997, New Hampshire's gross state product increased by 5.6% - a value which exceeded both the New England and the national rate.

3.2 POPULATION GROWTH

In terms of population, New Hampshire has experienced steady population growth throughout the 1990s. Between 1990 and 2000, New Hampshire's population increased by approximately 127,000 (11%) or approximately 12,700 residents per year (1.1%). Population projections indicate that the state is expected to continue with steady population growth over the next 20 years – outpacing all other New England states. The state is expected to grow by 25% over the next 20 years, increasing from a current population of 1.2 million to 1.5 million by 2020.

3.3 LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT

As shown in Table 3-1, New Hampshire's labor force has increased by approximately 58,000 workers between 1990 and 2000, representing an increase of 9.2% - almost 1% annually. The increased growth in the state's labor force is one indicator of a vibrant economy as people are drawn to areas where jobs are being created. Similarly, the number of employed individuals in New Hampshire increased by over 74,000 individuals (12.5%) between 1990 and 2000. A slowdown in economic growth throughout the state, as experienced throughout New England and nationally, has recently been experienced and therefore employment growth has slowed marginally throughout New Hampshire.





Table 3-1 – Trends in Labor, Employment and Unemployment: 1990-2000 State of New Hampshire								
1990 2000 # Change % Change								
627,670	685,510	57,840	9.2%					
592,070	666,320	74,250	12.5%					
Unemployment Rate 5.7% 2.8% -2.9%								
	State 6 1990 627,670 592,070	State of New Hamp 1990 2000 627,670 685,510 592,070 666,320	State of New Hampshire 1990 2000 # Change 627,670 685,510 57,840 592,070 666,320 74,250					

As New Hampshire's labor force and employment increased substantially during the 1990s, unemployment dropped to unprecedented lows. During the early 1990s, as the State and the rest of the country were weathering the storm of the recession, New Hampshire's unemployment rate mirrored the national rate of between 5% and 7%. However, over the past few years, New Hampshire has experienced unemployment rates that have been well below the national average. Since 1993 New Hampshire's unemployment rate has dropped by 3.8 percentage points from 5.5% to its current (2000) average of 2.8%. Meanwhile during the same time period, the national unemployment average declined by 2.9 percentage points with the 2000 national unemployment rate at 4%. Figure 3-1 provides a comparison between New Hampshire and the national unemployment rates throughout the 1990s.

Unemployment Rate U.S. Source: NH Department of Employment Security and U.S. Bureau of Labor Statisitics

Figure 3-1 - Unemployment Rate Trends 1990-2000 - U.S. and New Hampshire

Although the major employment indicators (high employment and low unemployment) signal one of the most positive economic times in New Hampshire history, extremely low unemployment has created a shortage of labor throughout the state.

New Hampshire's service industry is the largest and one of the fastest growing sectors. Based on 1998 employment estimates, approximately 28% of the state's employment was within the service industry. Of the 79,000 new jobs created between 1990 and 1998 in New Hampshire, over 50% (40,900) were within the service sector – representing an increase of 34%. Four major sectors within the services industry are:



New Hampshire Division of Aeronautics

New Hampshire State Airport System Plan Update



- Health care services;
- Business services;
- Engineering and management services; and,
- Educational services.

New Hampshire's health care services industry (which includes hospitals, clinics, nursing homes, etc.) employs approximately 50,600 people.

Business services, which employ over 31,000 people, is the fastest growing branch of the services industry. Software companies, which fall under the business service category, have proliferated during the period of economic expansion over the past five years. Many of the software companies in southern New Hampshire have taken advantage of the explosion of information technology firms which have established themselves along Boston's Route 128 "Tech Corridor". As Boston's Route 128 Tech Corridor approaches maximum build-out, many information technology firms who are looking to relocate are moving to southern New Hampshire. In addition to being within commuting distance to Boston, high quality of life as well affordable "wired" office space makes New Hampshire an attractive location for high technology firms.

Engineering and management firms throughout the state employ approximately 24,000 people. New Hampshire Employment Security projects that between 1998 and 2008 engineering and management employment should be in heavy demand in terms of the number of annual openings.

The educational services sector employs approximately 20,000 individuals. New Hampshire has a 50% higher employment concentration in the educational services sector as compared to the national average. In terms of educational attainment, the state takes advantage of a highly educated workforce with approximately 27% of residents having a college degree. Currently, 65,000 students are enrolled in 23 post-secondary institutions throughout the state. However, as only 50% of high school graduates attend college in New Hampshire (4th lowest nationally), attracting and keeping future highly skilled employees is an ongoing concern.

Wholesale and retail trade is New Hampshire's second largest employer with over 165,000 employed. Between 1990 and 1998, the trade sector (combined wholesale and retail) increased its employment base by over 23,000 (nearly 50%). Although it accounts for approximately 27% of the state's employment, the trade sector accounts for only 15% of New Hampshire's gross state product.

Traditionally a primary generator of economic activity, New Hampshire's industrial sector accounts for one quarter of the gross state product – 8% higher than the national average. Based on 1998 employment estimates, approximately 19% of the state's workforce is employed in the manufacturing sector, down 2% from 1990. In terms of manufacturing outputs, there has been a shift from traditionally low value added non-durable goods production (such as paper and lumber) to higher value added products such as computer hardware and electronics manufacturing. According to New Hampshire in the New Economy: A Vision for Expanded Prosperity, New Hampshire ranks second in the nation in terms of percentage of private sector employment in high technology (jobs in electronics manufacturing, software, computer related services and telecommunications).

Travel and tourism are mainstays of the state economy with spending by tourists accounting for over 8% of the gross state product. It is estimated that approximately 64,000 people are employed within the travel and tourism industry in the state. Although travel and tourism is not considered a specific industrial sector, majority of employment within travel and tourism is concentrated within the service and retail trade sectors. Based on the results of surveys conducted by the NH Division of Travel and Tourism Development, the large majority of tourists drive to the state, as opposed to fly or take trains into the state.

New Hampshire State Airport System Plan Update



Employment within the finance, investment and real estate (FIRE) sector accounts for approximately 5% of the state's employment base. Between 1990 and 1998, employment in the FIRE sector rose sluggishly by approximately 300 workers (1%). However, although the FIRE sector is not a major employer, it is a major contributor to the economy of the state, currently accounting for 22% of the gross state product, which is second among all industrial sectors.

In terms of government employment, approximately 13% of the state's employment is within the local, state and federal government organizations, based on 1998 estimates. This was an increase of approximately 6,100 government employees (9%) from 1990.

Although the agriculture and forest industry currently employs less than 1% of the state's workforce, this sector experienced the largest gain in employment between 1990 and 1998 with an additional 1,665 employees (49%). The fastest growing segments of the state's agricultural industry are in higher value-added areas such as greenhouse and nursery production, flowers, turf, landscape material and services. In terms of economic impact, New Hampshire exports approximately \$20 million annually in food and agricultural products with the forestry sector contributing \$1.7 billion to the state economy. Figure 3-2, shows the change in New Hampshire's employment within each industrial sector between 1990 and 1998.

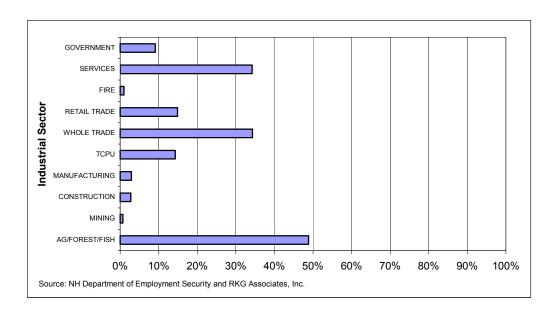


Figure 3-2 - Employment Change 1990-1998 - State of New Hampshire

3.4 WAGES

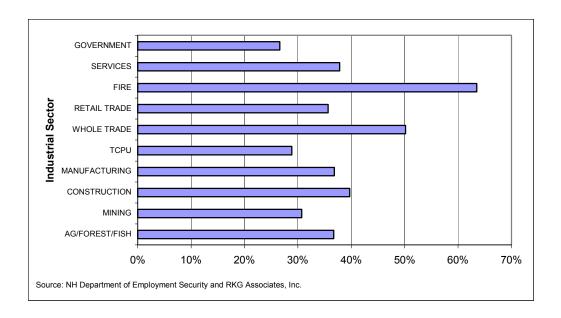
In terms of average weekly wages for all employment sectors, between 1990 and 1998 New Hampshire workers increased their average weekly wage by \$160 (37%). As shown in Figure 3-3, the FIRE and wholesale trade sectors had the highest gains in average weekly wages with gains of 64% and 50% respectively.







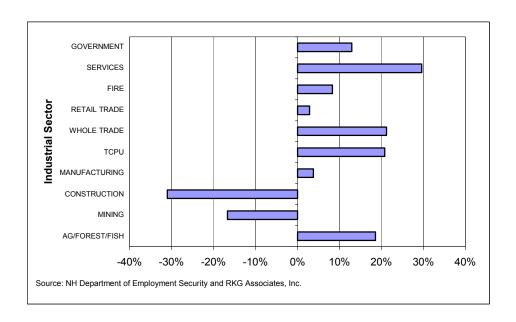
Figure 3-3 - Change in Average Weekly Wages 1990-1998 - State of New Hampshire



3.5 BUSINESS ESTABLISHMENTS

Over 35% of business establishments within New Hampshire are in the service industry. Additionally, the service industry experienced the largest gain in establishment growth between 1990 and 1998 with the addition of 3,100 establishments (30%). Over the same time period, the mining and construction industries lost a combined 1,500 establishments (approximately 48%). Figure 3-4 shows the change in New Hampshire's establishments between 1990 and 1998.

Figure 3-4 - Change in Establishments 1990-1998 - State of New Hampshire









3.6 AIR TRANSPORTATION

As air transportation has increased in importance within the state's intermodal network, investments in aviation infrastructure have transformed New Hampshire (Manchester Airport specifically) into the aviation hub of northern New England. The state's airports, primarily in the southern tier, have become a primary regional hub for commercial passenger, charter, general aviation and air cargo. For example, Manchester Airport passenger traffic increased from approximately 750,000 in 1991 to approximately 3.2 million in 2000 representing an increase of 320%.

3.7 REGIONAL SOCIOECONOMIC PROFILES

The following are summaries of socioeconomic conditions within each of nine New Hampshire economic regions. As discussed in Chapter 2, for the purposes of this study, the state has been divided into nine regions, which correspond to the jurisdictions of the nine regional planning commissions. Table 3-2 provides a summary of the cities and towns included within each economic region.

	Table 3-2 - New Hampshire Economic Regions
Region	Towns and Cities Included
Strafford	Barrington, Dover, Durham, Farmington, Middleton, Milton, New Durham, Newmarket, Rochester, Rollinsford, Somersworth, Strafford, Lee, Madbury, Northwood, Nottingham, Wakefield
North Country	Albany, Bartlett, Bath, Benton, Berlin, Bethlehem, Campton, Carroll, Chatham, Clarksville, Colebrook, Columbia, Conway, Dalton, Dummer, Easton, Eaton, Ellsworth, Errol, Franconia, Gorham, Groton, Hart's Location, Haverhill, Jackson, Jefferson, Lancaster, Landaff, Littleton, Lincoln, Lisbon, Lyman, Madison, Milan, Monroe, Northumberland, Pittsburg, Plymouth, Randalph, Rumney, Shelburne, Stewartstown, Stratford, Sugar Hill, Thorton, Warren, Waterville Valley, Wentworth, Whitefield, Woodstock
Southwest	Alstead, Antrim, Bennington, Chesterfield, Dublin, Fitzwilliam, Francestown, Gilsum, Greenfield, Greenville, Hancock, Harrisville, Hinsdale, Jaffrey, Keene, Langdon, Marlborough, Marlow, Mason, Nelson, New Ipswich, Peterborough, Richmond, Rindge, Roxbury, Sharon, Stoddard, Sullivan, Surry, Swanzy, Temple, Troy, Walpole, Westmoreland, Winchester, Windsor
South	Auburn, Bedford, Candia, Chester, Deerfield, Derry, Goffstown, Hooksett, Londonderry, Manchester, New Boston, Raymond, Weare
Nashua	Lyndeborough, Mont Vernon, Wilson, Milford, Brookline, Hollis, Amherst, Merrimack, Nashua, Litchfield, Hudson, Pelham
Lakes	Andover, Ashland, Barnstead, Belmont, Bridgewater, Bristol, Brookfield, Center Harbor, Danbury, Effingham, Franklin, Freedom, Gilford, Gilmanton, Hebron, Hill, Holderness, Laconia, Meredith, Moultonboro, New Hampton, Northfield, Ossipee, Sanbornton, Sandwich, Tamworth, Tilton, Wolfeboro
Rockingham	Windham, Salem, Atkinson, Hampstead, Plaistow, Newton, Kingston, Sandown, Danville, Fremont, Epping, Brentwood, East Kingston, South Hampton, Kensington, Hampton Falls, Seabrook, Hampton, North Hampton, Rye, Portsmouth, Newington, Greenland, Stratham, Exeter, Newfields,
Upper Valley	Acworth, Canaan, Charlestown, Claremont, Cornish, Croydon, Dorchester, Enfield, Goshen, Grafton, Grantham, Hanover, Hartford, Hartland, Lebanon, Lempster, Lyme, Newbury, New London, Newport, Norwich, Orange, Orford, Piermont, Plainfield, Springfield, Sunapee, Unity, Washington, Wilmot
Central	Allenstown, Boscawen, Bow, Bradford, Canterbury, Concord, Deering, Dunbarton, Epsom, Henniker, Hillsboro, Hopkinton, Loudon, Pembroke, Pittsfield, Salisbury, Sutton, Warner, Chichester, Webster









Regional planning authorities were established in order to assist municipalities with planning and economic development plans and programs. Any respective regional authority's jurisdiction is defined by the boundaries of the communities who agree to be members of the regional planning authority. Therefore, by natural association, communities with similar geographic and economic commonalities have gravitated together to form relatively coherent economic regions. Since the communities themselves have naturally defined these regions, and that economic activity does not respect county and other political boundaries, it was determined that the regional planning authority jurisdictions would be most appropriate for defining New Hampshire's economic regions.

Where available, socioeconomic information for each of the regions has been presented based on an aggregation of data for each of the towns within the region. However, as socio-economic data is not always available for some small municipalities, county or labor market area (LMA) data has been used where appropriate (unemployment rates for example). The data used within the regional economic profiles has been obtained from the New Hampshire Department of Employment Security and Claritas, Inc., a private provider of demographic data¹.

In order to provide a basic economic "snapshot" or profile of each region, socioeconomic information has been presented which will include:

- Major transportation links;
- Population trends and projections;
- Household income trends;
- Educational attainment levels:
- Distribution of business establishments by major industry sector;
- Distribution of employment by major industry sector;
- Major Employers; and,
- Unemployment.

Additionally, information on each of the region's airport facilities is provided.

3.8 ROCKINGHAM REGION

The Rockingham region, located in the southeast corner of the state, is part of what is commonly known as New Hampshire's seacoast (and also "e-coast") region. Several medium-sized towns and cities are found within the region including Portsmouth, Salem, Newington and Exeter. Over the last few years, the region as a whole has taken advantage of the positive economic influence and growth, which has emanated from the greater Boston area. However, it is interesting to note that different markets influence different geographic areas within the region. For example, the eastern part of the region (Portsmouth area) has a strong economic connection with southeastern Maine (York County), while the western portion (Salem area) has strong economic ties to the Greater Boston market. Many people who work in the greater Boston area are attracted to live in southern New Hampshire due to its relatively affordable housing, high quality of life, and tax advantages.

The region historically built its economy on manufacturing through the extensive series of mills within the region, and resources such as fishing and farming. However, although these activities are still very much a part of the regional economy, new economy businesses and industries have transformed the area into an information technology and business service driven economy. As the supply of developable land

¹ As the 2000 census provided only limited demographic information at the time of publication (population and race) for a limited number of communities, Claritas estimates were used as it provides the most complete estimate of socioeconomic conditions for each region. Claritas estimates are considered comparable to U.S. Census Bureau estimates.

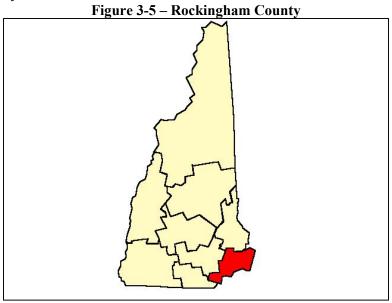






and office space becomes limited within greater Boston's 128 technology corridor, more and more information technology businesses are moving their operations to southern New Hampshire – including the Rockingham region. In addition to having an abundant supply of high quality office space, information technology firms are attracted to the region because of its relatively close proximity to the 128 technology corridor and the availability of highly educated and skilled workers.

Prior to the economic boom experienced throughout the 1990s, however, the region suffered two significant blows in the late 1980s –a deep economic recession and the closing of Pease Air Force Base. The state stepped in and took over the base, and has been actively marketing and developing the facility very successfully since the early 1990s. As a result, the Tradeport has more than 160 operating businesses/tenants; in excess of 3,800,000 square feet of new, or newly renovated space; created 5,000 new jobs, with additional commitments to bring the total to 9,000+ jobs; and 1,000,000 square feet of new construction underway in 2002.



3.8.1 TRANSPORTATION (ROCKINGHAM)

The region has interstate access north to Maine and south to the greater Boston area and points beyond through Interstate 95 – one of the three interstates that service the state. Furthermore, the region is bisected by Route 101, which serves as a major route east, and west from Portsmouth to Manchester, Interstate 93 and Interstate 89. Interstate 93 provides additional access to the greater Boston area as well as access into northern New Hampshire.

The City of Portsmouth in the eastern portion of the region has one of the eastern seaboard's major harbor facilities, Kittery Naval Shipyard, located in Maine, which serves as a repair facility for naval vessels and is a major regional employer. The Port of Portsmouth, as well as several privately owned and operated marine terminals in Newington, provide for movement of a wide variety of bulk, break-bulk and specific cargos to/from New Hampshire as well as the greater Northeast.

In terms of airport facilities, the region is home to two airports (Table 3-3) – Hampton Airfield in the Town of North Hampton and Pease International Tradeport in Portsmouth and Newington. Hampton Airfield is a general aviation facility with a grass runway that serves the needs of predominately single-engine aircraft. Pease International Tradeport, a former Air Force Base which was closed and redeveloped into one of the country's most successful commercial and industrial parks, also has the longest runway in





the state, and presently accommodates passenger, cargo, and general aviation aircraft. Pease has successfully developed the airport to meet FAA standards, attract commercial passenger as well as cargo service, and also to accommodate the NH Air National Guard 157th Air Refueling Wing. Furthermore, Pease has taken advantage of the region's significant corporate presence by developing hangars for corporate aircraft, some of which are from Massachusetts and were based at Pease to take advantage of the lack of a sales tax in NH.

Table 3-3 - Airport Facilities - Rockingham Region							
Name Ownership Location # Surface Runways Type (ft)							
Hampton Airfield	Private	North Hampton	1	Turf	2,100		
Pease International Tradeport Public Portsmouth/Newington 1 Asphalt 11,321							
Source: Federal Aviation Administra	tion and RKG	Associates, Inc.					

3.8.2 POPULATION (ROCKINGHAM)

Based on estimates provided by Claritas, Inc., the Rockingham region has a current (2000) population of approximately 180,800. The region experienced significant population growth during the 1980s with an increase of approximately 27,300 residents (20%) over the decade – representing an increase of approximately 2% per year. Compared to the growth in the 1980s, population growth slowed during 1990s. Between 1990 and 2000, the region's population increased by approximately 20,600 (13%) – representing an average annual increase of 1.3% per year. Population projections indicate that growth should continue at its current average annual rate over the next five years. Table 3-4 shows population trends and projections for the region.

Table 3-4 - Population Trends and Projections Rockingham Region				
Population				
2005 Projection	193,882			
2000	180,866			
1990	160,231			
1980	132,926			
% Change 90-00	12.9%			
% Change 80-90 20.5%				
Source: Claritas, Inc.				

3.8.3 HOUSEHOLD INCOME (ROCKINGHAM)

Based on current household income data, the current median household income in the region is approximately \$60,000 (Table 3-5).

Table 3-5 - Median Household Income Trends Rockingham Region				
Median HH Income				
2000 Med HH Income	\$60,044			
1990	\$41,104			
% Change 90-00	46.1%			
Source: Claritas, Inc.				







This represents an increase of approximately \$19,000 (46%) from 1990 household income levels. Based on an average inflation increase of 3% per year throughout the 1990s, households in the region have more than kept pace with inflation.

3.8.4 EDUCATIONAL ATTAINMENT (ROCKINGHAM)

In terms of educational attainment for the population over 25 years of age, over 34% of the population have graduated from a post-secondary educational institution, which is approximately 2% higher than the state average. The large number of college graduates is one of the reasons many information technology and business service companies have chosen the region as their home. During the latest period of positive economic growth in the late 1990s and early 2000s, obtaining and retaining highly skilled labor is seen as crucial to positive commercial growth – which the region has capitalized on. Table 3-6 summarizes the regional educational attainment levels for residents over the age of 25.

Table 3-6 - Educational Attainment (Population Over 25 Years)						
Rockingham Region						
	#	% of Total				
Less than 9th Grade	4,572	4.3%				
9th to 12th Grade, No Diploma	9,897	9.3%				
High School Graduate	33,687	31.6%				
Some College, No Degree	21,686	20.4%				
Associate Degree	9,166	8.6%				
Bachelor's Degree	18,866	17.7%				
Graduate or Prof. Degree	8,680	8.1%				
Total	106,554	100.0%				
Source: Claritas, Inc.						

3.8.5 LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT (ROCKINGHAM)

Based on current employment data, between 1990 and 1999, the Rockingham region experienced a labor force increase of approximately 11,100 (7.8%) and employment increase of approximately 15,000 (11%). The increase in labor force for the region outpaced the statewide average by 1.7% and employment average by 1.6% indicating that the region is attracting people who commute into the region to work. Strong employment numbers indicate that the region is attracting and retaining new business activity with the expansion of existing businesses. Table 3-7 shows the growth in employment and labor force in the region throughout the 1990s.

Table 3-7 - Labor Force and Employment Change: 1990-1999								
	Rockingham Region*							
	1990 1999 % Change 90-99							
Labor Force	143,840	155,000	7.8%					
Employment 134,880 149,810 11.1%								
*Note: Comprised	of Rocking	ham County	į					

Employment in the region is concentrated within the Trade (39,000 or 33% of total) and Service (38,600 or 32% of total) sectors. The manufacturing sector, historically a large employer in the region, still maintains a significant employment presence employing over 12,400 people or 10% of the employment base. The high technology sector is sizeable with the Pease International Tradeport in Portsmouth having an estimated 5,000 high technology jobs alone.





In terms of business establishments, the region, like most communities across the country, has a large majority of service and trade establishments. As shown in Figure 3-6, approximately 4,500 (39%) of businesses are within the service sector with approximately 3,300 (29%) being within the trade sector. Furthermore, due to New Hampshire having no sales tax and being in close proximity to Maine and Massachusetts (which have sales taxes), the region has a large retail establishment base. Interestingly, although the manufacturing sector has approximately 530 (5%) establishments, it employs approximately 23 people per establishment – seven more people per establishment than the transportation, communication and public utilities (TCPU) sector which is the second largest employer per establishment (16 jobs per establishment). Having a high number of manufacturing jobs per establishment indicates presence of large production facilities, which tend to be stable during positive economic conditions. However, if and when the economy softens, manufacturing jobs within large production facilities tend be affected first through lay-offs.

Government Services FIRE Trade TCPU Manufacturing Construction Ag/Forest/Fish 20% 40% 45% 0% 5% 25% 30% 35% ■% of Total Establishments ■% of Total Employment Source: Claritas, Inc. and RKG Associates, Inc.

Figure 3-6 - Employment and Establishments: 1999 Rockingham Region

The largest employers within the region are spread across many industrial sectors including manufacturing, Insurance, retail, health care and education. As shown in Table 3-8, two of the largest employers (Shaw's Supermarkets and Liberty Mutual Insurance) are very large employing over 3,500 people each².

City/Town	Employer	Product/Service	# Employees		
Stratham	Shaw's Supermarket	Grocery/Food	3,546		
Portsmouth	Liberty Mutual	Insurance	3,480		
Exeter	Exeter Hospital	Health Care	1,800		
Newington	Sears	Retail	1,700		
Exeter	Tyco International *	Telecommunications	1,400		
Stratham	Timberland	Outerwear	652		
Newfields	Hutchinson Sealing	Sealers	650		
Seabrook	Venture Seabrook	Power Plant	560		
Exeter Phillips Exeter Academy Education 520					
* Uses corporate aircraft based at Pease International Tradeport Source: NH Employment Security and Business NH Magazine					

² Based on estimates provided by the New Hampshire Department of Employment Security and Business NH Magazine's annual statewide business establishment survey. Note that employment estates for (the largest of) the large employers provided within this chapter may incorporate establishments outside of the respective region.



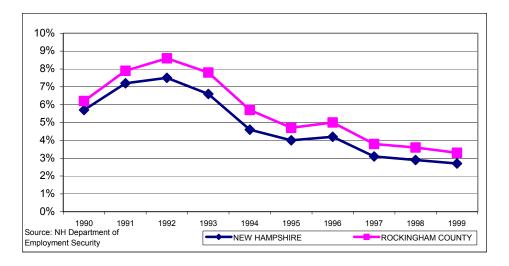
Page 3-12





Based on an analysis of unemployment rates throughout the 1990s, the Rockingham region has maintained unemployment rates which have consistently been between 0.5% and 1% above the statewide average (see Figure 3-7). Furthermore, between 1990 and 1999, the region has experienced a net reduction in its unemployment rate by approximately 3% which is the same reduction as the statewide rate over the same time period.

Figure 3-7 - Unemployment Rate: 1990-1999 - New Hampshire and Rockingham County



3.9 NASHUA REGION

The Nashua region, located in south central part of the state, contains some of the most populated urban centers within New Hampshire including Nashua and Merrimack (Figure 3-8).



Figure 3-8 - Nashua Region

Like the other regions in southern part of the state, in particular the Rockingham region, the Nashua region is heavily influenced by the economic activity generated from the greater Boston area. Furthermore, many people who live in the Nashua region commute south and work in the greater Boston area.







The Nashua region's economy historically was built on manufacturing and, to this day, maintains a large manufacturing presence. As with the Rockingham region, due to the Nashua region's relatively close proximity to the greater Boston market and limited supply of quality office space in the greater Boston area, many information technology and business service firms have made the move from Massachusetts to the Nashua region. As with the Rockingham region, many businesses are attracted to the area due to the availability of highly skilled workforce.

3.9.1 TRANSPORTATION (NASHUA)

The region is bisected by Route 3 (Everett Turnpike), one of the state's busiest highways, connecting to northern New Hampshire via Interstate 89 and 93, and to Interstate 495 and points south. The region is bisected by Route 101, which serves as a major linkage to the City of Keene in the west and the Seacoast area to the east.

In terms of airport facilities, the region is home to Boire Field located in Nashua (Table 3-9). Boire Field is a large general aviation facility in the state, which serves the needs of recreation, training, and corporate users. The facility is one of the busiest and most popular airports in the state (in terms of based aircraft – over 400 total), due in part to its proximity to populated urban centers in southern New Hampshire and northern Massachusetts. Nashua has also attracted aircraft from Massachusetts due to the lack of a sales tax in NH. However, Massachusetts recently exempted aircraft and parts from their state sales tax, so future aircraft may not locate out-of-state.

Table 3-9 - Airport Facilities - Nashua Region						
Name	Ownership Location # Surface Runways Type Runway Length (ft)					
Boire Field	Public	Nashua	1	Asphalt	5,501	
Source: Federal	Aviation Admir	nistration and	RKG Associa	ates, Inc.		

3.9.2 POPULATION (NASHUA)

The Nashua region has a current (2000) population of approximately 191,000. The Nashua region experienced significant growth during the 1980s and somewhat more modest growth during the 1990s. Between 1980 and 1990 the region's population grew by approximately 33,400 (24%) residents representing an increase of 2.4% annually over the time period. Population growth during the 1990s in the region was modest with an increase of 18,600 (11% or approximately 1% annually). Population projections indicate that the region should continue to grow at approximately 1% annually over the next five years. Table 3-10 shows the population trends and projections for the region.

Table 3-10 - Population Trends and Projections: 1980-2005 Nashua Region					
2005 Projection	201,110				
2000 Total	190,088				
1990 Total	171,478				
1980 Total	138,087				
% Change 90-00	10.9%				
% Change 80-90	24.2%				
Source: Claritas, Inc.					





3.9.3 HOUSEHOLD INCOME (NASHUA)

Based on current household income data, the current median household income in the region is approximately \$59,600 (Table 3-11) – which is comparable to the Rockingham region. The current median household income estimate for the Nashua region represents an increase of \$14,300 (32%) since 1990. Based on the average increase of 3% per year throughout the 1990s, households in the region have basically stayed even with inflation.

Table 3-11 - Median Household Income			
Nashua Region			
2000 Med HH Income \$59,660			
1990	\$45,290		
% Change 90-00 31.7%			
Source: Claritas, Inc.			

3.9.4 EDUCATIONAL ATTAINMENT (NASHUA)

As shown in Table 3-12, almost 39% of the population over the age of 25 has graduated from college, which is approximately 7% higher than the state average. As with the Rockingham region, the large proportion of residents with college degrees (including 9% with graduate or professional degrees) has attracted business activity to the region.

Table 3-12 - Educational Attainment Population Over 25 Years				
Nashua Region				
	#	% of Total		
Less than 9th Grade	5,622	5.10%		
9th to 12th Grade, No Diploma	10,398	9.40%		
High School Graduate	30,200	27.40%		
Some College, No Degree	21,501	19.50%		
Associate Degree	9,730	8.80%		
Bachelor's Degree	22,874	20.80%		
Graduate or Prof. Degree	9,862	9%		
Total	110,187			
Source: Claritas, Inc.				

3.9.5 LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT (NASHUA REGION)

As shown in Table 3-13, between 1990 and 1999, the Nashua region has experienced a labor force increase of approximately 5,300 (2.7%) and an employment increase of approximately 10,800 (5.7%). The increase in labor force for the Nashua region was 3.4% below the statewide average and the increase in employment was 3.7% below the statewide average reflecting a large increase of commuters into the region.

Table 3-13 - Labor Force and Employment Change: 1990-1999 Nashua Region*				
	1990 1999 % Change 90-99			
Labor Force	98,590	100,420	1.9%	
Employment 93,560 97,430 4.1%				
*Note: Comprised of Hillshoro County excluding the Manchester PMSA				









Employment within the region is concentrated within services (35,800 or 30% of the total) and the trade sector (32,100 or 27% of the total). Manufacturing plays a very important role in the Nashua economy with nearly 23,000 jobs or approximately 19% of the employment base.

As shown in Figure 3-9, approximately 39% (35,800) of businesses are service related with approximately 26% (32,100) being trade related. Similar to the Rockingham region, the manufacturing sector in the Nashua region continues to have a significant presence. Although the region has relatively few manufacturing establishments (less than 600 manufacturing establishments or 6.4% of the total number of establishments) they have over 19% of the employment base – or approximately 39 employees per manufacturing establishment.

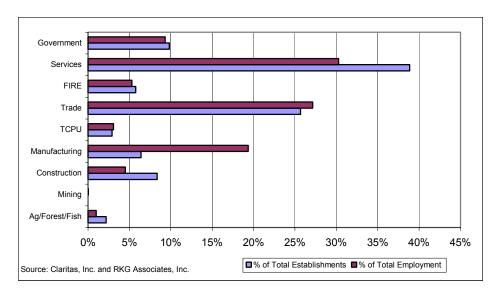


Figure 3-9 - Employment and Establishments: 1999 - Nashua Region

As shown in Table 3-14, the Nashua region has a great concentration of large employers in the high technology and health care sectors. Furthermore, although the region is the state's industrial and commercial core, the city of Nashua is the location of choice for the region's largest employers.

Based on an analysis of unemployment rates throughout the 1990s, the Nashua region mirrored the statewide unemployment rate (see Figure 3-10) with the only exception being slightly higher unemployment in the region during the mid-1990s. Between 1990 and 1999 the unemployment rate in the region has declined by 2.1% that is 0.9% less than the change in the statewide unemployment rate over the same time period.

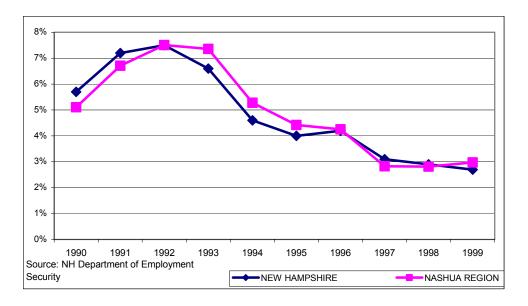






Ta	Table 3-14 - Largest Employers: Nashua Region				
	New Hampshire				
City/Town	Employer	Product/Service	# Employees		
Nashua	Demoulas	Grocery/Food	5,000		
Nashua	Sanders	Electronics	3,700		
Merrimack	Fidelity Investments	Financial	3,000		
Nashua	Compaq Computer	Computer Man.	2,400		
Nashua	Teradyne, Inc.	Communications	1,900		
Nashua	St. Joseph Hosp.	Health Care	1,603		
Nashua	So. NH Med. Center	Health Care	1,500		
Milford	Hitchiner Man.		1,303		
Nashua	Oxford Health	Health Care	1,219		
Merrimack	PC Connection	Computers	1,122		
Hudson	Benchmark Elec.	Electronics	700		
Source: NH Employment Security and Business NH Magazine					

Figure 3-10 - Unemployment Rates: 1990-1999 New Hampshire and Nashua Region



3.10 SOUTHWEST REGION

The Southwest region is an area that incorporates all of Cheshire County and a portion of western Hillsboro County in southwest New Hampshire. Covering approximately 1,000 square miles, the region contains mostly small rural communities with the largest urban center being the City of Keene with a population of approximately 22,500. As shown in Figure 3-11, the region borders Vermont to the west and Massachusetts to the south.

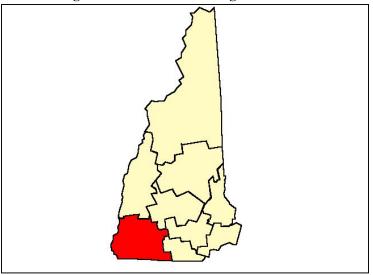
The southwest region is typically described as quintessentially "New England" with small villages, rolling farmland and a scattering of older industrial mill complexes.







Figure 3-11 - Southwest Region



3.10.1 TRANSPORTATION (SOUTHWEST REGION)

The region has three major highways including: Route 101 which provides access to central New Hampshire and the seacoast area; Route 12 which provides access to south to Massachusetts and north to the Upper Valley region; and Route 9 which provides access to Vermont and points west. Interstate 91, located just across the Vermont border (Connecticut River), runs north/south and provides excellent access to western Massachusetts, New York as well as southern Ontario and Quebec.

The region is home to three airports (see Table 3-15) – Dillant-Hopkins Airport, Hawthorne Airport and Silver Ranch Airport in Jaffrey. Dillant-Hopkins Airport, located in Swanzey, is the biggest airport in the western part of the state and caters to single and multi-engine general aviation aircraft. Hawthorne and Silver Ranch Airports are smaller facilities that cater mostly to single engine general aviation aircraft.

Table 3-15 - Airport Facilities - Southwest Region						
Name	Ownership Location # Runways Surface Type Runway Length (ft)					
Dillant-Hopkins	Public	Swanzey	2	Asphalt	6,201 & 4,001	
Hawthorne	Private	Antrim	1	Asphalt	3,260	
Silver Ranch	Private	Jaffrey	1	Asphalt	2,982	
Source: Federal Aviation Administration and RKG Associates Inc						

In terms of commercial air service, the region is strongly influenced by Bradley International Airport, which is located in Hartford Connecticut (one hour south) off of I-91. However, due to their proximity to the Massachusetts border, both Dillant-Hopkins and Silver Ranch Airports have attracted general aviation airplanes from that state to avoid paying the state sales tax. Massachusetts repealed that tax in early 2002, thereby decreasing the incentive for out-of-state owners to base airplanes in NH.

3.10.2 POPULATION (SOUTHWEST REGION)

The Southwest region has a current population of approximately 92,600. Although the region experienced considerable population growth (12,700 people representing an increase of 17%) during the



New Hampshire State Airport System Plan Update



1980s, population growth during the 1990s was significantly less (an additional 4,300 people representing an increase of 5%). Population projections indicate that growth should continue at approximately 0.5% annually over the next five years. Table 3-16 shows population trends and projections for the Southwest region.

Table 3-16 - Population and Household Trends and		
Projections: 1980-2005 Southwest Region		
2005 Projection	95,420	
2000 Total	92,652	
1990 Total	88,342	
1980 Total	75,581	
% Change 90-00	4.9%	
% Change 80-90	16.9%	
Source: Claritas, Inc.		

3.10.3 HOUSEHOLD INCOME (SOUTHWEST REGION)

As shown in Table 3-17, the current median household income in the region is approximately \$43,900. This represents an increase of approximately \$10,600 (32%) from the 1990 median household income level. Based on an average inflation increase of 3% per year, households in the region have kept pace with inflation. Comparatively, households in the southwest region earn approximately 36% less than households in the other two southern New Hampshire regions.

Table 3-17 - Median Household Income		
Southwest Region		
2000 Med. HH Income	\$43,915	
1990 Med. HH Income	\$33,319	
% Change 90-00	31.8%	
Source: Claritas, Inc.		

3.10.4 EDUCATIONAL ATTAINMENT (SOUTHWEST REGION)

In terms of educational attainment for the population over 25 years of age, approximately 33% of the region's population have graduated from college, which is 1% higher than the state average. Table 3-18 summarizes the regional educational attainment levels for residents over the age of 25.

Table 3-18 - Educational Attainment 1990 (for Pop. Over 25 Years) Southwest Region		
	#	%
Less than 9th Grade	3,626	6.5%
9th to 12th Grade, No Diploma	6,469	11.6%
High School Graduate	18,195	32.5%
Some College, No Degree	9,430	16.9%
Associate Degree	3,922	7.0%
Bachelor's Degree	9,490	17.0%
Graduate or Prof. Degree	4,767	8.5%
Total	55,899	
Source: Claritas, Inc.	·	





3.10.5 LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT (SOUTHWEST)

Based on current employment data, between 1990 and 1999 the southwest region experienced virtually no growth in labor force or employment. As shown in Table 3-19, the region's labor force declined by approximately 400 (-1%) individuals while the number of employed increased slightly by 290 (0.8%). It is evident that as the state has increased employment by approximately 9% throughout the 1990s, the southwest region has not been able to capture a significant portion of this growth.

Table 3-19 - Labor Force and Employment Change: 1990-1999 Southwest Region				
1990 1999 % Change 90-99				
Labor Force	38,880	38,480	-1.0%	
Employment 37,150 37,440 0.8%				
*Note: Comprised of Cheshire County				

Employment in the region is concentrated in the service sector (16,300 or 34% of total) and the trade sectors (11,400 or 24% of total). Manufacturing represents a significant portion of the employment base with over 7,500 jobs (16%).

Like most communities, the southwest region has a large proportion of its business establishments in the trade and service sectors. As with the other southern regions, the southwest region has a large retail base due to no state sales taxes and its close proximity to Vermont and Massachusetts. As shown in Figure 3-12, approximately 1,800 (40%) businesses are service oriented while approximately 1,200 (25%) are trade oriented.

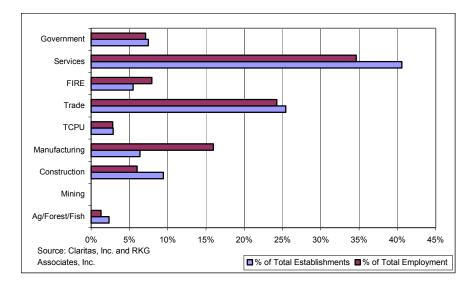


Figure 3-12 - Employment and Establishments: 1999 Southwest Region

Compared to the other southern regions, the southwest region has significantly fewer large employers with only two (Timken Aerospace and New Hampshire Ball Bearings) employing over 1,000. Furthermore, three of the four largest employers are located in Keene. Table 3-20 shows the largest employers in the Southwest region.







Table 3-20 - Largest Employers: Southwest Region New Hampshire					
City/Town	Employer	Product/Service	# Employees		
Keene	Timken Aerospace	Aerospace	1,358		
Peterborough	NH Ball Bearings	Ball Bearing Man.	1,031		
Keene	Sims Portex Inc.		850		
Keene	Markem Corp.		650		
Source: NH Employment Security and Business NH Magazine					

Between 1990 and 1999 the region has been able to maintain an average unemployment rate, which is 0.7% below the statewide unemployment rate. Between 1990 and 1999, the county has experienced a decline in its unemployment rate by 1.7%. Figure 3-13 shows a comparison between the region and the statewide unemployment rates between 1990 and 1999.

8% 7% 6% 5% 4% 3% 2% 1% 0% 1991 1993 1994 1995 1996 1997 1999 Source: NH Department of Employment NEW HAMPSHIRE CHESHIRE COUNTY Security

Figure 3-13 - Unemployment Rates: 1990-1999 New Hampshire and Cheshire County

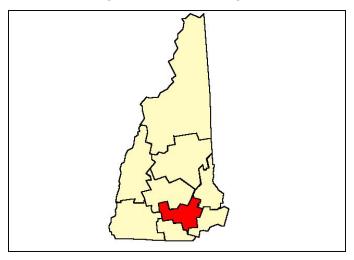
3.11 SOUTH REGION

The south region, located in the south central part of the state, is the urban and industrial center of the state (see Figure 3-14). The region contains the largest city in the state, Manchester, which has a current population of approximately 107,000. Furthermore, the cities of Derry (population 34,000) and Londonderry (population 23,200) make the region a hub for commercial activity.





Figure 3-14 - South Region



Like other regions in the state, the south region has its industrial and commercial roots in manufacturing. As one of the major manufacturing centers for the country during the nineteenth century, the industrial activity in Manchester's extensive array of mill buildings created a host of durable and non-durable goods – most notably textiles.

As the manufacturing industry declined during the past fifty years, other industries, such as financial services, insurance, warehousing and distribution and information technology, have moved into the mill buildings and helped to redevelop the region.

3.11.1 TRANSPORTATION (SOUTH REGION)

The ability to efficiently move goods in and out of the region is achieved through the extensive highway network in the area. Access to northern New Hampshire and markets in Massachusetts and the southern New England is achieved via Interstate 93. The region is connected to the City of Nashua (the state's second largest city) via the Everett Turnpike/Route 3. Furthermore, Route 101 provides direct access to the Seacoast region to the east, and Keene and Vermont to the west.

Complementing the highway network is Manchester Airport - the state (and northern New England's) busiest airports in terms of passenger enplanements (Table 3-21). Manchester Airport, located in the City of Manchester, provides commercial passenger and cargo services for a region which encompasses the entire state of New Hampshire, southern Vermont and Maine, and northern Massachusetts. As a former small municipal airport developed from a World War II airbase (Grenier Field), Manchester has been transformed over the past 15 years into northern New England's primary distribution hub for passengers, packages and cargo.

In terms of passenger traffic, nine major air carriers including Southwest Airlines, United Airlines, US Airlines, Northwest Airlines and Air Canada currently serve Manchester. These carriers provide service to a number of major destinations across North America such as New York City, Chicago, Tampa and Toronto. As for cargo operations, two of the nation's largest courier companies (Federal Express and United Parcel Service), and a handful of smaller cargo companies, use Manchester as a hub for shipping and receiving packages and cargo.







Table 3-21 - Airport Facilities - South Region					
Name	Ownership	Location	# Runways		Runway Length (ft)
Manchester	Public	Manchester	2	Asphalt	7,573 & 9,250
Source: Federal Aviation Administration and RKG Associates, Inc.					

The State of New Hampshire's Department of Resource and Economic Development (DRED) considers the Manchester Airport a major generator of economic activity throughout the entire state. An economic impact study completed for the airport in 1999³ indicated that, as of 1998, on-airport businesses employed approximately 1,400 people – an increase of 985 employees (41%) since 1994. Based on the total direct, indirect and induced economic impacts, it is estimated that the Manchester airport contributes approximately \$540 million to the New Hampshire economy. According to an economic study prepared by Leigh Fisher & Associates in 1998, it was projected that the airport's economic impact could reach \$1B by 2010.

Although the airport is clearly a major contributor to the New Hampshire economy, it is unclear how much impact the airport has in attracting new businesses to the state. Based on interviews with government and industry representatives, the airport in and of itself is not necessarily a major attractant of new business activity. However, the size, location, excellent parking and airline services offered by the airport complement other site selection criteria (such as the availability of land, an educated work force, available tax incentives, etc.) for businesses deciding to locate in New Hampshire.

3.11.2 POPULATION (SOUTH REGION)

Due to the presence of several large urban centers, the region has the largest population of all of the state's regions. Based on current estimates, the southern region has a population of approximately 240,800. Like its neighboring regions, the southern region experienced significant population growth during the 1980s, increasing by 44,500 residents (26% - or 2.6% per year). During the 1990s, population growth slowed considerably to approximately half that rate. Between 1990 and 2000, the region's population increased by approximately 24,300 (11% - or approximately 1.1% per year). Population projections indicate that the region's population should increase by approximately 14,800 residents over the next five years – representing a continuation of the current growth rate of 1.1% per year. Table 3-22 shows population trends and projections for the region.

Table 3-22 - Population Trends and Projections: 1980-2005 South Region		
2005 Projection	255,651	
2000 Total	240,815	
1990 Total	216,479	
1980 Total 171,951		
% Change 90-00	11.2%	
% Change 80-90	25.9%	
Source: Claritas, Inc.		

³ Leigh Fisher Associates. *Economic Impact Study Manchester Airport: Final Report*. December 1999.







3.11.3 HOUSEHOLD INCOME (SOUTH REGION)

As shown in Table 3-23, the current median household income in the region is approximately \$53,800. This represents an increase of approximately \$14,900 (38%) from 1990 household income levels. Based on an average annual inflation increase of 3% per year throughout the 1990s, households in the region have more than kept pace with inflation.

Table 3-23 - Median Household Income				
South Region				
2000 Med HH Income	\$53,807			
1990	\$38,914			
% Change 90-00 38.3%				
Source: Claritas, Inc.				

3.11.4 EDUCATIONAL ATTAINMENT (SOUTH REGION)

Based on 1990 education attainment data for the population over 25 years of age, approximately 32% of residents have college degrees – which is on par with the state average. Table 3-24, shows the distribution of residents by educational attainment.

Table 3-24 - Educational Attainment (Age 25+): 1990					
South Region					
	#	% of Total			
Less than 9th Grade	10,956	8.0%			
9th to 12th Grade, No Diploma	15,770	11.5%			
High School Graduate	41,571	30.2%			
Some College, No Degree	25,776	18.7%			
Associate Degree	11,557	8.4%			
Bachelor's Degree	21,899	15.9%			
Graduate or Prof. Degree	10,129	7.4%			
Total	137,658				
Source: Claritas, Inc.					

3.11.5 LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT (SOUTH REGION)

As shown in Table 3-25, between 1990 and 1999, the South region's labor force increased by approximately 3,600 (3.5%), which is 2.6% below the statewide average. Employment in the region experienced strong gains with the number of jobs increasing by 6,900 (7%) – approximately 2% below the state average during the same time period. Due to the lack of labor data for the south region (as defined within this report) the Manchester PMSA (primary metropolitan statistical area) has been used. The Manchester PMSA generally incorporates the same communities as the economic region does and is considered comparable for the purposes of this report.

Table 3-25 - Labor Force and Employment Change: 1990-1999					
South Region*					
	1990 1999 % Change 90-99				
Labor Force	102,000	105,560	3.5%		
Employment 96,090 103,010 7.2%					
*Note: Comprised of the Manchester PMSA					







Employment in the region is concentrated within the service (46,900 or 38% of total) and trade (35,200 or 29% of total) sectors. The manufacturing sector still maintains a strong employment base in the southern region with approximately 14,500 jobs (12%) – representing the third largest employing industrial sector behind trade and services.

As shown in Figure 3-15, the sectors with the highest proportion of establishments are the service (4,600 or 43% of total) and the trade sectors (2,800 or 26% of total). Compared to other economic regions, the southern region has a large concentration of construction (10% of total) and financial, insurance and real estate businesses (8% of total).

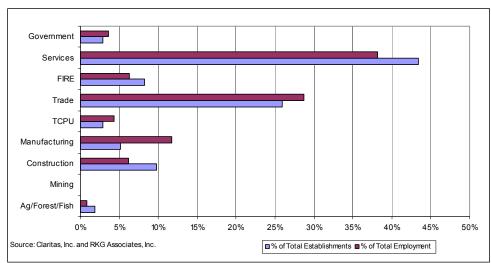


Figure 3-15 - Establishments and Employment: 1999 South Region

As shown in Table 3-26, the South Region is home to several very large employers who are concentrated in the retail, health care, utility and manufacturing sectors. The City of Manchester is the location of choice for large employers in the southern region.

Table 3-26 - Largest Employers: South Region New Hampshire				
Employer	Product/Service	# Employees		
Hannaford Bros.	Grocery/Food	3,983		
Bell Atlantic	Communications	2,150		
Osram-Sylvania		2,069		
Freudenberg-NOK		1,937		
Elliot Hospital	Health Care	1,800		
Cath. Med. Center	Health Care	1,600		
Wal-Mart	Retail	1,500		
General Electric	Electrical Components	1,350		
Citzens Bank	Financial	1,300		
PSNH	Utility	1,234		
Ames Inc.	Retail	1,200		
Framatome	Electronic Parts	724		
Velcro USA Inc.	Fasteners	700		
	Employer Hannaford Bros. Bell Atlantic Osram-Sylvania Freudenberg-NOK Elliot Hospital Cath. Med. Center Wal-Mart General Electric Citzens Bank PSNH Ames Inc. Framatome Velcro USA Inc.	Employer Product/Service Hannaford Bros. Grocery/Food Bell Atlantic Communications Osram-Sylvania Freudenberg-NOK Elliot Hospital Health Care Cath. Med. Center Health Care Wal-Mart Retail General Electric Electrical Components Citzens Bank Financial PSNH Utility Ames Inc. Retail Framatome Electronic Parts		







As the population, industrial and commercial hub of the state throughout the 1990s, the region has experienced unemployment rates, which have been virtually identical to the New Hampshire rates. As shown in Figure 3-16, between 1990 and 1999, the region had an annual unemployment rate which was, on average, 0.2% below the state annual average. Compared to the state, the region has experienced a slightly greater reduction in unemployment between 1990 and 1999 – a reduction of 3.4% as compared the state's unemployment reduction of 3%.

8% 7% 6% 5% 4% 3% 2% 1% 1990 199 Source: NH Department of 1992 1993 1994 1995 1996 1997 1998 1999 ►NEW HAMPSHIRE MANCHESTER PMSA **Employment Security**

Figure 3-16 - Unemployment Rates: 1990-1999 New Hampshire and Manchester PMSA

3.12 CENTRAL REGION

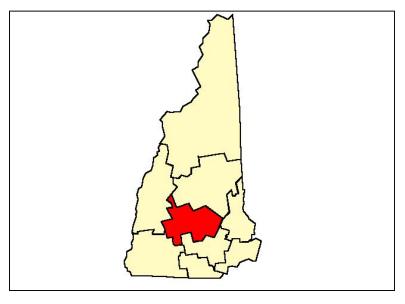
The Central economic region is home to the city of Concord – the State's third largest city (population approximately 40,700) and the State capital. In addition to Concord, the region contains several small urban centers including Pembroke (population 6,900) and Bow (population 6,300). Figure 3-17 shows the central region's location in the center of the state.

As the center of governmental activity for the State, the Central region's economy is focused primarily on government administrative activities and business services, which usually complement government activities. Additionally, manufacturing has historically been a strong component to the region's economy.





Figure 3-17 – Central Region



3.12.1 TRANSPORTATION (CENTRAL REGION)

Being centrally located, the region has three major highways – Interstate 93, Interstate 89 and Route 4. Interstate 93 bisects the region and provides access to northern New Hampshire as well as Massachusetts and southern points beyond. Interstate 89 provides access to the Upper Valley region and Vermont. Route 4 provides access to eastern New Hampshire and the Seacoast area.

In terms of airport facilities, the region is home to one public use airport – Concord Airport (see Table 3-27). Concord Airport is a general aviation facility that is owned by the City of Concord. It has 81 based aircraft, including a helicopter and airplane (Cessna 182) used by the State Police, as well as the NH Army National Guard, which operates UH-60 Blackhawks for medevac and search and rescue. Due to the location and proximity of other airports nearby (Nashua and Manchester), Concord Airport has not experienced significant growth over the past ten years, although the region has grown demographically. The primary users of the airport include personal, training, air taxi and corporate operators, as well as military operators. Concord used to have scheduled airline service, but no longer has such service.

Table 3-27 – Airport Facilities - Central Region					
Name	Ownership	Location	# Runways	Surface Type	Runway Length (ft)
Concord	Public	Concord	2	Asphalt	3,200 & 6,005
Source: Federal Aviation Administration and RKG Associates, Inc.					

3.12.2 POPULATION (CENTRAL REGION)

As shown in Table 3-28, current population estimate calculate that the region has a population of approximately 104,100. Between 1980 and 1990, the population in the region grew by approximately 18,800 (25%) – in-line with the significant population growth experienced in the Nashua (24%) and Southern (26%) regions. With the economic decline of the early 1990s, population growth in the region slowed by approximately one-third - increasing by approximately 8,300 residents (9% or less than 1% per







year). Population projections estimate that the region should modestly increase its rate of population growth to approximately 1% per year over the next four years.

Table 3-28 - Population Trends and Projections:		
1980-2005 Central Region		
2005 Projection	109,929	
2000 Total	104,152	
1990 Total	95,836	
1980 Total	77,005	
% Change 90-00	8.7%	
% Change 80-90	24.5%	
Source: Claritas, Inc.		

3.12.3 HOUSEHOLD INCOME (CENTRAL REGION)

Based on current household income data, the current median household income in the region is approximately \$49,000. This represents an increase of approximately \$13,000 (36%) since 1990. Although household incomes in the region have kept ahead of inflation throughout the 1990s, the median household income in the central region is more than \$10,000 less than incomes in its southern regional neighbors (Nashua and Southern regions). Table 3-29 shows the change in median household income within the Central region between 1990 and 2000.

Table 3-29 - Median Household Income				
Central Region				
2000 Med HH Income	\$49,042			
1990	\$35,994			
% Change 90-00 36.3%				
Source: Claritas, Inc.				

3.12.4 EDUCATIONAL ATTAINMENT (CENTRAL REGION)

As shown in Table 3-30, for the population over 25 years of age, approximately 34% of the population have graduated from a post secondary educational institution. Approximately 9% of those graduating have graduate level or professional degrees. Compared to the rest of the state, the Central region has a higher educational attainment level. For example, the region has approximately 2% fewer people who have not completed high school and 2% more who have graduated from college as compared to the entire state.

Table 3-30 - Educational Attainment (Age 25+): 1990 Central Region					
# % of Tota					
Less than 9th Grade	3,739	6.0%			
9th to 12th Grade, No Diploma	6,242	10.0%			
High School Graduate	19,773	31.6%			
Some College, No Degree	11,333	18.1%			
Associate Degree	5,122	8.2%			
Bachelor's Degree	10,577	16.9%			
Graduate or Prof. Degree	5,826	9.3%			
Total	62,612				
Source: Claritas, Inc.	•				





3.12.5 LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT (CENTRAL REGION)

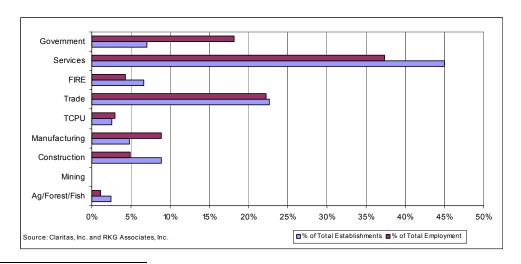
Based on current employment estimates, between 1990 and 1999, the Central region⁴ experienced an explosive increase in labor force and employment. During the 1990s, the region increased its labor force by approximately 14,300 (24%) – four times the state average over the same time period (see Table 3-31). Employment growth in the region was also explosive. During the 1990s, employment grew by 16,000 jobs (28%) – approximately three times the state average. The strong labor force and employment numbers indicate that the Central region has been viewed as a good place to invest in terms of expanding established businesses and starting new businesses.

Table 3-31 - Labor Force and Employment Change: 1990-1999						
Central Region*						
	1990 1999 % Change 90-99					
Labor Force	61,010	75,350	23.5%			
Employment 57,820 73,780 27.6%						
*Note: Comprised of Merrimack County						

Employment in the region is concentrated within the service (25,100 or 37% of total) and the trade (15,000 or 22% of total) sectors. As the State capital, the City and region are home to many State and Federal departments and agencies. Government employment accounts for over 18% (12,200) of the jobs in the region. Areas with high concentrations of government employment tend to have larger proportions of jobs in supportive sectors such as services. This is evident in the Central region as the percentage of jobs in the service sector (37%) is slightly higher than the other economic regions (with the exception of the South region which has 38% of its jobs based in the service sector).

In terms of businesses, the sectors with the highest concentrations of establishments include the service (2,430 or 45% of total) and the trade (1,230 or 23% of total) sectors (see Figure 3-18). The government sector contains approximately 380 establishments (7%), but, as previously mentioned, employs 18% of the labor force. Based on these estimates, each government establishment employs approximately 32 workers – the second largest employment generator per establishment compared to the other economic regions.

Figure 3-18 - Employment and Business Establishments: 1999 Central Region



⁴ For the purposes of the analysis of labor force, employment and unemployment, data for Merrimack County was used.





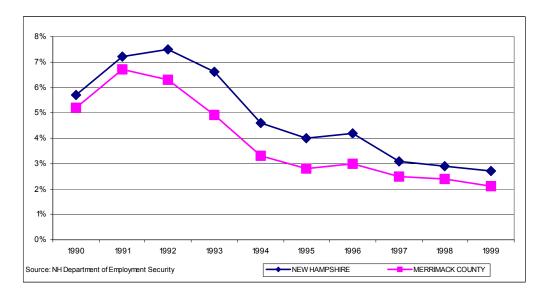


As shown in Table 3-32, the Central region is home to a handful of large employers, which are primarily concentrated in the health care sector. Although government is not listed as a large employer within the sources consulted, it is assumed that the State government could be considered one of the largest single employers in the region.

Table 3-32 - Largest Employers: Central Region New Hampshire					
City/Town Employer Product/Service # Employees					
Concord	Concord Hospital	Health Care	1,840		
Concord	Genesis Health	Health Care	1,504		
Loudon	Loudon NH Intl. Speedway Racetrack 1,200				
Concord Aavid Thermal Tech. 730					
Source: NH Employment Security and Business NH Magazine					

Between 1990 and 1999, unemployment in the region has averaged, approximately 1% below the statewide average (see Figure 3-19). Additionally, during the same time period, the region experienced a net reduction in its unemployment rate of 3.1%, close to the statewide reduction in unemployment (-3%).

Figure 3-19 - Unemployment Rates: 1990-1999 New Hampshire and Merrimack County



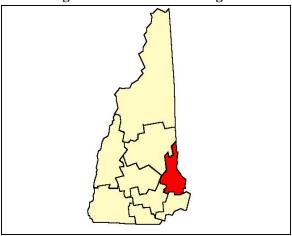
3.13 STRAFFORD REGION

The Strafford region is located north of the Rockingham region in New Hampshire's seacoast region (Figure 3-20). Several medium-sized cities are found within the region including Rochester (population 28,400), Dover (27,000), and Somersworth (11,400). In similar fashion to other southern New Hampshire regions (Rockingham, Southern and Nashua), the Strafford region has taken advantage of the influence of the strong economic activity, which has taken place in the greater Boston area. Furthermore, the region has significant cross-border influence from southern Maine (York County in particular). Like the other regions, which border other states, the Strafford region has a large retail base, which has developed due to the lack of sales tax in the state.





Figure 3-20 – Strafford Region



Historically the region has had its economic roots in manufacturing by taking advantage of the extensive network of rivers in the area (Cocheco and Salmon Falls) through the development of many millworks, as well as agriculture, relying on these same rivers for access to markets.

3.13.1 TRANSPORTATION (STRAFFORD REGION)

The region has access to Interstate 95 via Route 16 (Spaulding Turnpike) and to Interstate 93 via Route 4. Access to Interstate 95 provides the region with highway connections north into Maine and south into the greater Boston region.

In terms of airport facilities, the region is home to Skyhaven Airport in Rochester (Table 3-33). Skyhaven is a general aviation facility that serves as a base for personal and training operations, as well as some business and corporate activity. The facility, currently owned and operated by the State of New Hampshire, is home to more than 60 based aircraft, including 3 multi-engine aircraft. There is an extensive waiting list for additional hangar storage space at the airport. The airport is in close proximity to three other airports, including Sanford Airport in Maine, Pease International Tradeport, and Laconia Airport, all of which offer full service FBOs, charter services, and longer runways. In 2002, the NH General Court passed legislation requiring the NHDOT to transfer ownership of the airport to another public entity, if such an entity is willing to take the facility. The City of Rochester is considering the option, but has made no commitment to do so.

Table 3-33 - Airport Facilities - Strafford Region					
Name	Ownership	Location	# Runways	Surface Type	Runway Length (ft)
Skyhaven	Public	Rochester	1	Asphalt	4,001
Source: Federal Aviation Administration and RKG Associates, Inc.					

3.13.2 POPULATION (STRAFFORD REGION)

Based on current population estimates, the Strafford region has a population of approximately 135,000 (see Table 3-34). As with the other economic regions in southern New Hampshire, the Strafford region experienced substantial growth during the 1980s. Between 1980 and 1990, the region increased its population by approximately 24,000 (25% - or an average annual increase of 2.5%). During the 1990s,







region's population grew modestly by approximately 9,100 (7.6% or less than 1% per year throughout the decade). Population projections indicate that that the region's population should increase by 5,700 residents (4.4%) by 2005 – continuing the average annual growth rate of less than 1% experienced throughout the 1990s).

Table 3-34 - Population Trends and Projections: 1980-2005 Strafford Region		
2005 Projection	135,338	
2000 Total	129,663	
1990 Total	120,510	
1980 Total	96,348	
% Change 90-00	7.6%	
% Change 80-90	25.1%	
Source: Claritas, Inc.		

3.13.3 HOUSEHOLD INCOME (STRAFFORD REGION)

As shown in Table 3-35, the current median household income in the region is approximately \$45,500. This represents an increase of approximately \$12,600 (38%) since 1990. Based on an average annual inflation increase of approximately 3% throughout the 1990s, household incomes in the region have kept ahead of rising prices.

Table 3-35 - Median Household Income				
Strafford R	egion			
2000 Med HH Income	\$45,486			
1990	\$32,894			
% Change 90-00 38.3%				
Source: Claritas, Inc.				

3.13.4 EDUCATIONAL ATTAINMENT (STRAFFORD REGION)

Estimates indicate that the region is slightly below the state average for educational attainment. For example as shown in Table 3-36, for the population over the age of 25, approximately 30% have college degrees – which is approximately 2% less than the state average. Furthermore, approximately 20% of residents over the age of 25 have not completed high school – approximately 2% less than the state average.

Table 3-36 - Educational Attainment (Age 25+): 1990 Strafford Region			
	#	% of Total	
Less than 9th Grade	5,690	7.7%	
9th to 12th Grade, No Diploma	8,781	12.0%	
High School Graduate	23,921	32.6%	
Some College, No Degree	13,262	18.1%	
Associate Degree	5,673	7.7%	
Bachelor's Degree	10,528	14.3%	
Graduate or Prof. Degree	5,596	7.6%	
Total	73,451		
Source: Claritas, Inc.			





3.13.5 LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT (STRAFFORD REGION)

The economic downturn of the early 1990s hit the Strafford region especially hard. As shown in Table 3-37, between 1990 and 1999, while most of the region experienced growth, Strafford region's labor force was virtually unchanged (-0.2%). Although the region's labor force was static throughout the 1990s, employment increased modestly by 1,900 jobs – representing an increase of 3.5%. Having a stable labor force and increasing employment indicates that the region is drawing workers from outside the region.

Table 3-37 - Labor Force and Employment Change: 1990-1999					
	Strafford Region*				
	1990 1999 % Change 90-99				
Labor Force	57,850	57,710	-0.2%		
Employment 54,420 56,330 3.5%					
*Note: Comprised of Strafford County					

As shown in Figure 3-21, employment in the region is concentrated in the service (19,600 or 35% of total) and trade (14,300 or 25%) sectors. Compared to the other economic regions, the Strafford region has the highest concentration of jobs in the manufacturing sector (11,000 jobs or 19%). As most of New Hampshire's economic regions have had, at one time or another, major economic contributions from the manufacturing sector, the Strafford region continues to rely heavily on the contributions of manufacturing on the local economy.

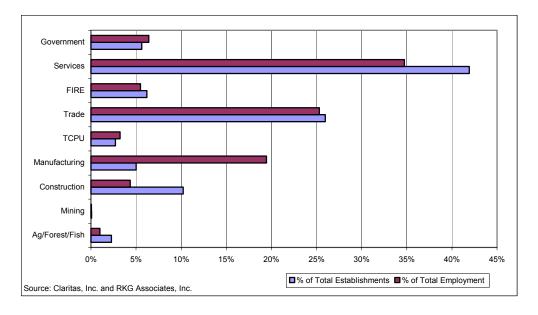


Figure 3-21 - Establishments and Employment: 1999 Strafford Region

Like other New Hampshire economic regions, the Strafford region relies heavily on service and trade establishments. Current (1999) business establishment data indicates that over 40% (2,000) of the region's businesses are service related (see Figure 3-21). The trade sector has the second largest number of establishments with approximately 1,230 (26%). Although the manufacturing sector incorporates 19% of the jobs in the region, it has only 5% of the business establishments which translates into each establishment employing approximately 46 workers – the largest employment generator per establishment of any economic region in the state.



New Hampshire State Airport System Plan Update



As shown in Table 3-38, the largest employers in the Strafford region are concentrated in the manufacturing sector. However the region has a significant high technology presence with the largest employer in the region, Cabletron Systems, being a leading-edge information technology firm.

Table 3-38 - Largest Employers: Strafford Region					
City/Town	Employer	Product/Service	#		
City/10Wii	Employer	1 Todaet, Sel vice	Employees		
Rochester	Cabletron Sys.	Communications	1,850		
Somersworth/Hooksett	General Electric	Electrical Components	1,350		
Dover Heidelberg Press Manufacturer 865					
Farmington Textron Auto. Auto Parts Man. 845					
Source: New Hampshire Office of State Planning Community Profiles					

Between 1990 and 1999, unemployment in the region has been, on average, 0.2% below the statewide unemployment rate (as shown in Figure 3-22). Furthermore, during the 1990s, the region declined its unemployment rate by 3.5% - 0.5% more than the State over the same time period.

8% 7% 6% 5% 4% 3% 2%

Figure 3-22 - Unemployment Rates: 1990-1999 New Hampshire and Strafford County

3.14 LAKES REGION

1990

1991

Source: NH Department of Employment Security

1992

The Lakes Region, located in north-central New Hampshire, is, as the name implies, rich in natural resources and features (Figure 3-23). Primarily a tourism-based economy, the region is home to a number of small cities and towns including Laconia (population 16,400), Gilford (6,000) and, Alton (3,500).

1994

1996

NEW HAMPSHIRE

1995

1997

1998

1999

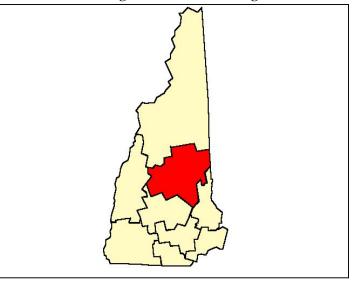
STRAFFORD COUNTY

For decades the region has been the recreation and vacation area for not only New Hampshire residents, but for residents in communities throughout the eastern seaboard. Besides the tourism industry, the region has also historically relied on the extraction of primary resources (lumber) as a prime driver of its economy.





Figure 3-23 – Lakes Region



3.14.1 TRANSPORTATION (LAKES REGION)

The region has interstate access from Interstate 93 which provides access to northern New Hampshire as well as access to southern markets including the greater Boston area. A series of secondary State highways (Route 25 and 28) traverse the mottled topography and provide connections to points in Maine and the Upper Valley region and Vermont.

As shown in Table 3-39, the region is home to four airports – Laconia Airport, which is located in Gilford, Lakes Region Airport in the town of Wolfeboro, Newfound Valley Airport in Bristol, and Moultonboro Airport. Laconia Airport, the largest of the region's airports, is a general aviation facility that has two full-service FBOs. Due to the proximity of Laconia Airport to the large seasonal homes on Lake Winnipesaukee, many corporate and business aircraft operators use the airport to shuttle clients and family into an out of the area. As part of an on-going master plan, the airport is considering a possible runway extension and construction of runway safety areas. Moultonboro Airport is a small general aviation facility used primarily by recreational operators. Lakes Region Airport is a small general aviation facility that offers a 2,540 asphalt runway. The single FBO left the airport in 2001, and the airport was recently offered for sale. NHDOT has formally said that it wants to acquire the airport in order to keep it open, however, the airport owner does not want to sell the airport to the state. Newfound Valley Airport in Bristol is a seasonal facility with three based aircraft.

Τ	Table 3-39 - Airport Facilities in the Lakes Region					
Name	Ownership	Location	# Runways	Surface Type	Runway Length (ft)	
Laconia	Public	Laconia	1	Asphalt	5,286	
Lakes Region	Private	Wolfeboro	2	Asphalt	2,540	
Newfound Valley	Private	Bristol	1	Asphalt	1,835	
Moultonboro Private Moultonboro 1 Asphalt 3,625						
Source: Federal Aviation Administration and RKG Associates, Inc.						





3.14.2 POPULATION (LAKES REGION)

The Lakes Region has a current population of approximately 94,700. Compared to the other economic regions in southern New Hampshire, the Lakes Region did not have a large population influx during the 1980s. Between 1980 and 1990, the region increased its population by approximately 12,400 (17%) or roughly 1.7% per year. Growth slowed somewhat during the 1990s as the population increased by 8,600 (10%) representing an average annual growth rate of 1% per year. Population projections indicate that the region should continue its average annual growth rate of approximately 1% over the next four years. Table 3-40 shows population trends and projections for the region.

Table 3-40 - Population Trends and Projections: 1980-2005 Lakes Region		
2005 Projection	100,302	
2000 Total	94,690	
1990 Total	86,100	
1980 Total	73,718	
% Change 90-00	10.0%	
% Change 80-90	16.8%	
Source: Claritas, Inc.		

3.14.3 HOUSEHOLD INCOME (LAKES REGION)

The current median household income in the region is approximately \$38,400 (see Table 3-41). This represents an increase of approximately \$8,000 (27%) since 1990. While median household incomes in economic regions in southern New Hampshire increased by at least 30% throughout the 1990s (thus staying ahead of inflation based on an average increase in inflation of 3% per year), households in the Lakes Region have lost ground income-wise.

Table 3-41 - Median Household Income Trends Lakes Region				
2000 Med HH Income \$38,404				
1990 \$30,326				
% Change 90-00 26.60%				
Source: Claritas, Inc.				

3.14.4 EDUCATIONAL ATTAINMENT (LAKES REGION)

Based on 1990 estimates, the Lakes Region is below average when compared to the educational attainment level of the state as a whole. As shown in Table 3-42 approximately 28% of residents over the age of 25 have college degrees – approximately 4% below the state average. Conversely, approximately 20% of residents have not graduated from high school – which is 2% above the statewide average.



New Hampshire State Airport System Plan Update



Table 3-42 - Educational Attainment (Population over 25 Years)				
Lakes Region				
	#	% of Total		
Less than 9th Grade	3,885	6.8%		
9th to 12th Grade, No Diploma	7,753	13.5%		
High School Graduate	19,636	34.2%		
Some College, No Degree	9,787	17.1%		
Associate Degree	4,527	7.9%		
Bachelor's Degree	8,246	14.4%		
Graduate or Prof. Degree	3,530	6.2%		
Total	57,364			
Source: Claritas, Inc.				

3.14.5 LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT (LAKES REGION)

Based on current employment estimates, the Lakes Region has a labor force of approximately 30,000 people which is an increase of approximately 3,100 (11%) since 1990 – almost twice the statewide rate. In addition to experiencing significant increases in labor force throughout the 1990s, the Lakes Region also experienced sizeable increases in employment. As shown in Table 3-43, between 1990 and 1999, employment in the region increased by approximately 4,000 jobs (16%). It should be noted that because labor and employment change data for the Lakes Region (as defined within this report) were unavailable, values for Belknap County have used instead.

Table 3-43 - Labor Force and Employment Change: 1990-1999					
	Lakes Region*				
	1990 1999 % Change 90-99				
Labor Force	26,950	30,030	11.4%		
Employment 25,300 29,320 15.9%					
*Note: Comprised of Belknap County					

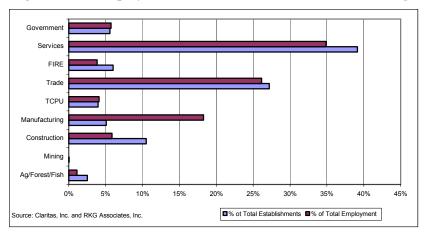
Employment within the Lakes Region is similar to other New Hampshire economic regions with the service (18,000 or 35% of total) and trade (13,400 or 27% of total) having the highest concentrations. The manufacturing sector still maintains a significant employment presence within the region having approximately 9,400 jobs (18%). Furthermore, as the region's economy was once heavily reliant on the extraction of primary resources, currently only 570 (1%) of the employment base is concentrated within the agriculture, fishing and forestry sector.

In terms of business establishments, majority of businesses within the region are within the service (2,000 or 39% of total) and trade sectors (1,400 or 27% of total) – with both percentage values similar to other economic regions. However, the region has over 540 construction establishments (11% of total) which may be attributed to the surge in development of seasonal homes in the region. Figure 3-24 shows the distribution of employment and business establishments within the region.





Figure 3-24 - Employment and Establishments: 1999 Lakes Region



As shown in Table 3-44, the largest employers in the region employ significantly fewer people as compared to the largest employers in the southern regions of the state with the largest establishment employing 640 people. Large employers in the Lakes Region are concentrated heavily within the manufacturing sector.

Table 3-44 - Largest Employers: Lakes Region New Hampshire				
City/Town	Employer	Product/Service	# Employees	
Franklin	Polyclad Laminates	Laminates	640	
Franklin	Webster Valve and Foundry	Valve Man.	565	
Laconia	MacNeil Worldwide	Sports Equipment	147	
Laconia	Lewis and Sanders Inc.	Metal Fabrication	130	
Alton	Alton Education Department	Public Education	116	
Alton Town of Alton Government 110				
Source: NH Employment Security and Business NH Magazine				

As shown in Figure 3-25, notwithstanding an approximate 0.5% increase in unemployment during the early 1990s, unemployment in the region has been consistent with the statewide unemployment rate. Additionally, between 1990 and 1999, unemployment has decreased by 3.7% - 0.7% more than the statewide average.





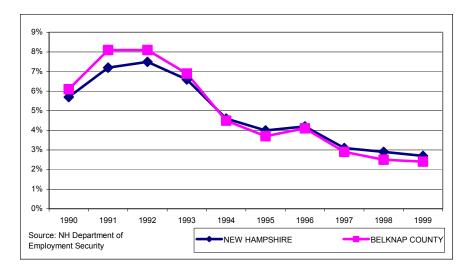


Figure 3-25 - Unemployment Rates: 1990-1999 New Hampshire and Belknap County

3.15 UPPER VALLEY REGION

As shown in Figure 3-26, the Upper Valley region is located in west-central New Hampshire. The region is comprised of mostly small towns with a handful of medium-sized cities and towns including Claremont (population 13,900), Lebanon (12,900) and Hanover (9,600). The region is characterized as primarily rural in character with small farms and lakes being commonplace. Medical and other research conducted at Dartmouth College, located in Lebanon, has help spur the development of some medical and information technology parks in the Lebanon area.

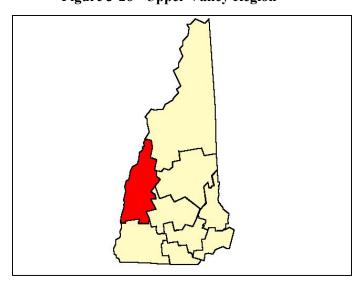


Figure 3-26 - Upper Valley Region

3.15.1 TRANSPORTATION (UPPER VALLEY REGION)

Interstate access is provided by Interstate 89, which runs from the southeast to the northwest – essentially bisecting the region. Several smaller highways, including Route 11 for example, provide access west into Vermont and east into the Lakes Region.



New Hampshire State Airport System Plan Update



As shown in Table 3-45, three airports are located within the Upper Valley region including Claremont Airport, Parlin Field in Newport, and the state's third commercial airport, Lebanon Airport in west Lebanon. Claremont Airport is a general aviation facility, which primarily serves as a base for recreational operations, although the facility does handle a small percentage of corporate aircraft. Parlin Field is a small general aviation facility, which serves the needs of recreational flyers. Lebanon Airport is one of three commercial service airports in the state, which provides regional commuter passenger service to Philadelphia, New York and Boston. Additionally, the facility has a large FBO that provides fuel, repair and charter services, flight training, as well as serves corporate aircraft.

Table 3-45 - Airport Facilities - Upper Valley Region						
Name	Ownership	Location	# Runways	Surface Type	Runway Length (ft)	
Lebanon	Public	Lebanon	2	Asphalt	5,496 & 5,200	
Parlin Field	Public	Newport	2	Turf & Asphalt	1,950 & 3,450	
Claremont Public Claremont 1 Asphalt 3,100						
Source: Federal Aviation Administration and RKG Associates, Inc.						

Lebanon Airport has experienced a decline in passenger traffic due to low-fare jet service Manchester, Bradley, and Burlington Airports. According to the Airport Manager at Lebanon Airport, Southwest Airlines' discount airfares have drawn passengers away from the Upper Valley to the point where the commuter carrier serving Lebanon cannot compete effectively. In order to keep commercial service in Lebanon, a non-profit organization called Fly Lebanon, Inc. has been formed with the sole purpose of retaining commercial flights at the facility.

3.15.2 POPULATION (UPPER VALLEY REGION)

As shown in Table 3-46, the Upper Valley region has a current population of approximately 81,300. Compared to the other economic regions, the Upper Valley region has experienced slow population growth over the past twenty years. Between 1980 and 1990, while most of New Hampshire's economic regions were growing at an average annual rate of 1% or more, the Upper Valley region grew by approximately 6,500 residents or 0.9% per year. The 1990s brought about even slower population growth. Between 1990 and 2000, the region grew in population by approximately 4,800 residents (6.2% or 0.6% per year). Population projections indicate that the region's population should increase at a rate of 0.7% per year over the next four years.

Table 3-46 - Population Trends and Projections Upper Valley Region		
2005 Projection	84,372	
2000 Total	81,326	
1990 Total	76,573	
1980 Total	70,046	
% Change 90-00	6.2%	
% Change 80-90	9.3%	
Source: Claritas, Inc.		





3.15.3 HOUSEHOLD INCOME (UPPER VALLEY REGION)

Based on current household income data, the current median household income in the region is approximately \$44,700 (see Table 3-47). This represents an increase of approximately \$12,800 (40%) since 1990. Based on an average inflation increase of 3% per year throughout the 1990s, households in the region have more than kept pace with inflation.

Table 3-47 - Median Household Income Upper Valley Region			
2000 Med HH Income	\$44,672		
1990	\$31,867		
% Change 89-00	40.2%		
Source: Claritas, Inc.			

3.15.4 EDUCATIONAL ATTAINMENT (UPPER VALLEY REGION)

In terms of educational attainment for the population over 25 years of age, over 33% of the population have graduated from a post-secondary educational institution (see Table 3-48). The region has approximately 3% more residents with graduate or professional degrees as compared to the statewide average indicating that the region has a high level of educational attainment.

Table 3-48 - Educational Attainment (Population over 25 Years) Upper Valley Region					
# % of Total					
Less than 9th Grade	3,704	7.6%			
9th to 12th Grade, No Diploma	6,041	12.4%			
High School Graduate	16,011	32.8%			
Some College, No Degree	6,792	13.9%			
Associate Degree	3,517	7.2%			
Bachelor's Degree	7,562	15.5%			
Graduate or Prof. Degree	5,151	10.6%			
Total	48,778				
Source: Claritas, Inc.					

3.15.5 LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT (UPPER VALLEY REGION)

As shown in Table 3-49, between 1990 and 1999, the Upper Valley region's labor force increased modestly by approximately 1,600 (4%) while employment increased by approximately 2,900 jobs (7%). Throughout the 1990s, the growth in the Upper Valley's labor force and employment were approximately 2% less than the growth on a statewide basis. Table shows the growth in labor force and employment in the region throughout the 1990s.

Table 3-49 - Labor Force and Employment Change: 1990-1999					
Upper Valley Region*					
1990 1999 % Change 90-99					
Labor Force	42,050	43,650	3.8%		
Employment	39,970	42,820	7.1%		
*Note: Comprised of Claremont LMA and NH portion of Lebanon LMA					









Employment in the region is heavily concentrated in the service sector with approximately 27,000 jobs (48%) or one out of every two jobs being service oriented. Interestingly, the region still supports a large manufacturing employment base with approximately 7,600 jobs (13%) the respective industrial sector.

As shown in Figure 3-27, similar to the distribution of employment in the region, approximately 46% (2,200) of business establishments are within the service sector. Trade establishments comprise approximately 22% (1,200) of the total businesses, which is the second largest in terms of percentage of establishments.

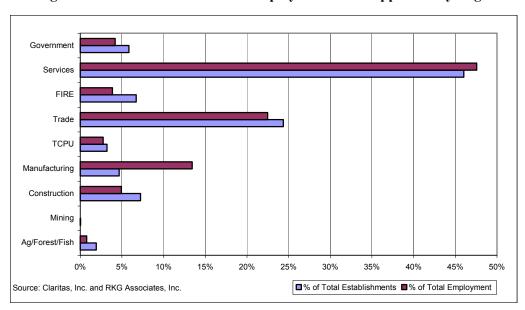


Figure 3-27 - Establishments and Employment: 1999 Upper Valley Region

As with the other regions which border neighboring states, a large retail base has been established in the Upper Valley region due to the lack of sales tax which draw consumers from east-central Vermont.

As shown in Table 3-50, the institutional sector is by far the largest employer in the region with the Dartmouth Hitchcock medical center and Dartmouth College employing over 8,000 people.

Table 3-50 - Largest Employers: Upper Valley Region New Hampshire					
City/Town Employer Product/Service # Employees					
Lebanon	Dartmouth Hitchcock	Medical Center	4,393		
Hanover	Dartmouth College	Education	3,650		
Newport	Newport Sturm, Ruger Co. 1,211				
Hanover	Hypertherm, Inc.		575		
Source: NH Employment Security and Business NH Magazine					

Based on an analysis of unemployment rates throughout the 1990s, the Upper Valley region has consistently maintained unemployment which is at least 1% (and sometimes up to 2%) below the state average (see Figure 3-28). However, in terms of change in unemployment, throughout the 1990s, unemployment in the region decreased by the same rate as the statewide average (3%).







8% 7% 6% 5% 4% 3% 2% 1% 0% 1997 1999

1994

1995

NEW HAMPSHIRE

1996

1998

UPPER VALLEY

Figure 3-28 - Unemployment Rates: 1990-1999 New Hampshire and Upper Valley Region

3.16 NORTH COUNTRY REGION

1990

1991

Source: NH Department of Employment Security

1992

1993

The North Country region, which represents the upper half of the state (see Figure 3-29), contains mountains and wilderness that is synonymous with the New Hampshire landscape. With the exception of the city of Berlin (population 10,300), the region contains mostly small towns and villages. Compared to southern New Hampshire, the North Country region has been dependent on the forest products industry and therefore been more susceptible to layoffs during downturns in the economy. To that end, the region typically has remained an unstable economic environment as compared to the rest of the state. The region has historically been built upon the extraction of timber for processing into pulp and paper products. However, competition from other pulp and paper facilities throughout North America has placed pressure on the industry within the North Country region to a point of extreme volatility.

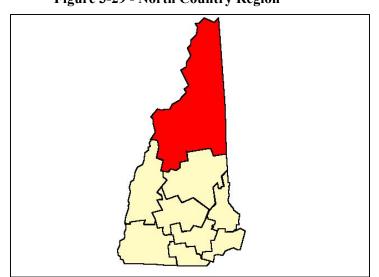


Figure 3-29 - North Country Region





In order to compensate for the volatility in the regional economy, efforts have been made to become less reliant on the resource industry. For example, the tourism industry in the region has become a multi-million dollar industry for the region.

3.16.1 TRANSPORTATION (NORTH COUNTRY REGION)

The region is serviced by Interstate 93 and two main highways (Route 3 and Route 16) which connect the region to southern New Hampshire as well as Vermont, Maine and Canada.

In terms of airport facilities, the North Country region has nine general aviation airports – the largest concentration of facilities of any region in the state (see Table 3-51). The largest facility is located in Berlin, which serves as a corporate and recreational operation hub for the region. The remaining eight airports, five of which have either turf or gravel runways, primarily function as bases to serve private, recreational, and tourism related operations. Interviews with airport management at both Berlin and the Mt. Washington Regional Airports indicate that the airports are seen as a key component of the regional economy. Management at each facility has drafted marketing and development strategies in order to take advantage of what they see as the undeveloped potential that the airports offer.

Table 3-51 - Airport Facilities - North Country Region					
Name	Ownership	Location	# Runways	Surface Type	Runway Length (ft)
Berlin	Public	Milan	1	Asphalt	5,200
Colebrook	Private	Colebrook	1	Turf	2,440
Errol	Private	Errol	1	Gravel	3,680
Franconia	Private	Franconia	1	Turf	2,305
Gorham	Public	Gorham	1	Turf	2,800
Mt. Washington Regional	Public	Whitefield	1	Asphalt	3,495
Plymouth	Public	Plymouth	1	Turf	2,380
Twin Mountain	Private	Twin Mountain	1	Asphalt	2,640
Dean Memorial	Public	Haverhill	1	Asphalt	2,500
Source: Federal Aviation Administration and RKG Associates, Inc.					

3.16.2 POPULATION (NORTH COUNTRY REGION)

As shown in Table 3-52, the North Country region has a current population of approximately 81,300. Since 1980, the region has experienced very slow population growth (7,500 residents representing an increase of approximately 10%). With approximately 9% of the total growth occurring in the 1980s, the 1990s have been a decade of virtual population stagnation for the region. Population projections for the next four years indicate that the region should continue with stagnant growth with an average annual growth rate of 0.3%.

Table 3-52 - Population Trends and Projections		
North Country Region		
2005 Projection	82,478	
2000 Total	81,327	
1990 Total	80,290	
1980 Total	73,798	
% Change 90-00	1.3%	
% Change 80-90	8.8%	
Source: Claritas, Inc.		





3.16.3 HOUSEHOLD INCOME (NORTH COUNTRY REGION)

Based on current household income data, the current median household income in the region is approximately \$34,200 (see Table 3-53). Comparatively, the North Country region has the lowest median household income in the state – approximately \$4,200 less than the next lowest region (Lakes Region). The current median household income level for the region represents an increase of approximately \$7,700 (29%) since 1990. Based on an increase in inflation of 3% annually, households in the North Country region have lost ground in terms of spending power.

Table 3-53 - Median Household Income		
North Country Region		
2000 Med HH Income	\$34,195	
1990	\$26,512	
% Change 90-00	29.0%	
Source: Claritas, Inc.		

3.16.4 EDUCATIONAL ATTAINMENT (NORTH COUNTRY REGION)

Compared to both the individual economic regions and the entire state, the North Country region has the lowest educational attainment level. For the population over 25 years of age, 24% are college graduates (8% less than the statewide average) – a value which is coincidentally the same percentage of residents who have not completed high school. As mentioned earlier, one of the motivating factors for many information technology firms moving into the economic regions of southern New Hampshire has been the supply of skilled workers. It appears that the low educational attainment level of the North Country region's population may be a limiting factor in promoting the area to prospective businesses seeking sites for expansion. Table 3-54 shows the distribution of educational attainment levels for the region's population over the age of 25.

Table 3-54 - Educational Attainment (Population Over 25 Years) North Country Region			
	#	% of Total	
Less than 9 th Grade	5,302	10.1%	
9th to 12 th Grade, No Diploma	7,136	13.6%	
High School Graduate	20,036	38.3%	
Some College, No Degree	7,468	14.3%	
Associate Degree	3,728	7.1%	
Bachelor's Degree	6,010	11.5%	
Graduate or Prof. Degree	2,628	5.0%	
Total	52,308		
Source: Claritas, Inc.			

3.16.5 LABOR FORCE, EMPLOYMENT AND UNEMPLOYMENT (NORTH COUNTRY REGION)

As shown in Table 3-55, between 1990 and 1999, the North Country region has experienced a modest increase in its labor force of approximately 3,300 (5.6%). Furthermore, employment growth in the region has been in-line with the statewide average increasing by 5,200 jobs (9.4%) over the same time period.







Table 3-55 - Labor Force and Employment Change: 1990-1999 North Country Region*			
	1990	1999	% Change 90-99
Labor Force	59,130	62,430	5.6%
Employment	55,380	60,590	9.4%

*Note: Comprised of Colebrook, Lancaster, Berlin, Littleton, Conway and Plymouth

Employment in the region is concentrated heavily in the service sector with approximately 23,200 (44%) jobs falling within this respective sector. The trade sector is the second highest employer with approximately 15,200 jobs – representing approximately 29% of the employment base. Manufacturing has a significant presence employing approximately 5,400 (10%) of the employment base. For a region that has its historical roots in resource extraction, currently only 1% of the North Country's jobs are in resource industries (agriculture, forestry and fishing).

As with employment, majority of the region's business establishments are concentrated within the service (2,330 43% of total) and trade (1,600 or 30% of total) sectors. Figure 3-30 shows the distribution of employment and business establishments by industrial sector for the North Country region.

Establishments in the North Country region serve a market, which crosses two state borders (Maine and Vermont) and one international border with Canada.

As shown in Table 3-56, the largest employers in the North Country region are significantly smaller than the southern economic regions (with the exception of the Lakes Region). The pulp and paper processor, Pulp and Paper of America, located in Berlin is the region's largest employer with close to 900 jobs. Concentrated in entirely in Berlin, other large employers within the region are distributed in the health care, retail, government and manufacturing sectors.

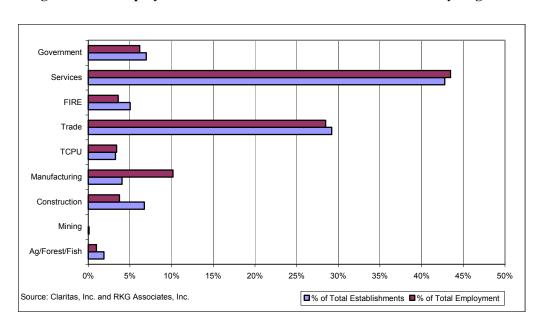


Figure 3-30 - Employment and Establishments: 1999 North Country Region







Table 3-56 - Largest Employers: North Country Region					
	New Hampshire				
City/Town	Employer	Product/Service	#		
City/ I o wil	Employer	1 Todace Scr vice	Employees		
Berlin	Pulp and Paper of America *	Pulp/Paper	892		
Berlin	Androscoggen Valley Hospital	Health Care	336		
Berlin	Berlin City Dealerships	Auto Dealer	205		
Berlin	City of Berlin	Government	170		
Berlin	Isaacson Steel	Steel Fabricators	147		
Source: NH Employment Security					
* Pulp & Paper of America sold the mills to Fraser Papers of Connecticut					

Between 1990 and 1999, unemployment in the region has been high with the average annual unemployment rate being approximately 0.5% higher than the annual average for the state. However, although the region has had higher unemployment than the rest of the state, the North Country region has experienced a net decrease in unemployment of 3.4% during the 1990s-0.4% more then the state during the same time period. Figure 3-31 compares the average annual unemployment rates for both the region and the state during the 1990s.

Figure 3-31 - Unemployment Rates: 1990-1999 New Hampshire and North Country

